



GS04: Tools and Environments

Lab Session 6: JUnit and Emma

The aim of this lab session is to gain experience with unit testing tools. In particular, we will explore JUnit and Emma with EclEmma. JUnit comes with Eclipse (and we will be using JUnit 3). EclEmma is available from <http://www.eclEmma.org/> (but installed on the CS machines).

Defining Unit tests with JUnit

Check out the trunk configuration of Project StackTest from our subversion repository. Review class IntStack. Using JUnit 3 write a number of unit tests for the class. Execute the unit tests using Eclipse.

Executing Unit Tests using ant

Create a build.xml file that you can use to run JUnit tests outside Eclipse. Execute the unit tests you have written from a command line with ant.

Coverage Analysis with Emma

Use the Eclipse Emma plug-in to determine the coverage that your unit tests achieve and modify them as necessary to achieve 100% statement coverage.